

WHAT IS CLAIMED IS:

1. A method for accessing a command unit for a data network, comprising:

operating a plurality of applications in a subscriber of the data network such that the applications access a data bus of the subscriber;

by a first one of the applications, writing at least one command structure into an address space of a memory of the subscriber via the data bus;

by the first one of the applications, writing a pointer to the address space into an input register of the command unit via the data bus;

by the command unit, accessing the address space via the data bus and processing the command structure; and

after the subscriber has processed the command structure, writing the pointer into an output register that is assigned to the first one of the applications.

2. The method as claimed in Claim 1, further comprising controlling access to the data bus by an arbiter unit, such that access is allowed for a predefined number of bus cycles and such that the predefined number of bus cycles is sufficient for writing the pointer into the input register.

3. The method as claimed in Claim 1, wherein the command structure includes an acknowledge field, and wherein the method further comprises:

after writing the pointer by the subscriber, blocking the input register;
by the subscriber, writing an acknowledgment into the acknowledge field;

after the acknowledgment, enabling the input register by the subscriber.

4. The method as claimed in Claim 3, further comprising:

after writing the pointer, reading the input register by the first one of the applications;

by the first one of the applications, checking whether the input register includes the pointer;

if the input register does not include the pointer, checking whether the acknowledgement has been stored in the acknowledge field.

5. The method as claimed in Claim 1, wherein the command structure includes executable commands and user data.

6. The method as claimed in Claim 1,

wherein the first one of the applications writes a plurality of interlinked command structures into the memory; and

wherein the pointer points to the address space of a first one of the command structures of the plurality of interlinked command structures.

7. A computer program product for an application of a subscriber of a data network, wherein the application accesses a data bus for a plurality of applications of the subscriber, wherein the subscriber has an input register and an output register assigned to the application, the computer program product comprising:

a computer-readable medium; and

computer-readable instructions on the computer-readable medium enabling a processor to perform the following operations:

writing a command structure into an address space of a memory of the subscriber via the data bus;

writing a pointer to the address space into the input register of the command unit via the data bus; and

reading the input register to check whether the command unit has acknowledged the command structure.

8. The computer program product as claimed in Claim 7, wherein the computer program product comprises a digital storage medium.

9. The computer program product as claimed in Claim 7, further comprising checking an acknowledge field in the command structure if the pointer is no longer located in the input register when the input register is read.

10. The computer program product as claimed in Claim 7,
wherein a plurality of interlinked command structures is written into the memory of the subscriber; and

wherein the pointer points to the address space of a first command structure of the plurality of interlinked command structures.

11. A computer program product as claimed in Claim 7, wherein the output register assigned to the application is read to check whether the command unit has processed the command structure.

12. A subscriber of a data network, comprising:

a command unit configured to access the data network, the command unit having an input register;

an operating assembly configured to operate a plurality of applications such that the applications access a data bus of the subscriber;

a memory having an address space;

a first writer configured to write at least one command structure into the address space by a first one of the applications via the data bus;

a second writer configured to write a pointer to the address space into the input register by the first one of the applications via the data bus;

an access assembly for the command unit configured to access the address space via the data bus and configured to process the command structure; and

a third writer configured to write the pointer into an output register that is assigned to the first one of the applications after the subscriber has processed the command structure.

13. The subscriber as claimed in Claim 12, further comprising:

an arbiter unit configured to control access to the data bus, wherein the access is allowed for a predefined number of bus cycles, and wherein the predefined number of bus cycles is sufficient for writing the pointer into the input register.

14. The subscriber as claimed in Claim 12, wherein the command structure has an acknowledge field, the subscriber further comprising:

a blocker configured to block the input register after writing the pointer by the subscriber;

a fourth writer configured to write an acknowledgment into the acknowledge field by the subscriber; and

an enabling assembly configured to enable the input register by the subscriber after the acknowledgment.

15. The subscriber as claimed in Claim 14, further comprising:

a reader configured to read the input register by the first application after writing the pointer; and

a checker configured to check, by using the first one of the applications, whether the input register includes the pointer and, if the input register does not include the pointer, configured to check whether an acknowledgment has been stored in the acknowledge field.

16. The subscriber as claimed in Claim 12, wherein the command structure includes executable commands and user data.

17. The subscriber as claimed in Claim 12, further comprising a plurality of interlinked command structures in the memory, wherein the pointer is configured to point to the address space of a first one of the plurality of interlinked command structures.

18. A communication system, comprising:

a data network; and

a plurality of subscribers, each subscriber comprising:

a command unit configured to access the data network, the command unit having an input register;

an operating assembly configured to operate a plurality of applications such that the applications access a data bus of the subscriber;

a memory having an address space;

a first writer configured to write at least one command structure into the address space by a first one of the applications via the data bus;

a second writer configured to write a pointer to the address space into the input register by the first one of the applications via the data bus;

an access assembly for the command unit configured to access the address space via the data bus and configured to process the command structure; and

a third writer configured to write the pointer into an output register that is assigned to the first one of the applications after the subscriber has processed the command structure.